because it falls to the bottom of the bottle and can only be suspended by continual shaking. M. Bonnet has therefore proposed to employ glycerine as a medium for the administration of chloroform. Equal parts of chloroform and glycerine are poured into a mortar, and the mixture is rubbed up gently until no more drops of chloroform can be perceived; then the distilled water or other adjuvant is added, and a very limpid mixture is obtained, not exhibiting the slightest trace of chloroform in the free state. The glycerine should be quite pure—that is to say, it ought to be carefully freed from organic matters, fatty volatile acids, a little sulphuric acid, and certain salts, with which it is often adulterated in commerce. Dr. Debout approves the suggestion of M. Bonnet as to the mixture of chloroform with glycerine, but he recommends that the proportions of the two should be different. Dr. Debout's formula consists of thirty grammes of glycerine and two grammes of chloroform, a teaspoonful for a dose in a glass of water. The dose of chloroform thus taken amounts to twelve drops.—*Brit. and For. Med.-Chir. Rev.*, July, 1861, from *Bull. Gén. de Thérap.*, April 15, 1861.

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7. *On the Operation of Aniline upon the Animal Body.*—Dr. SCHUCHARDT made a series of experiments to prove the effects of aniline upon animals. Aniline is an oily liquid, of powerfully basic properties, obtained by the distillation of indigo, and the name aniline is derived from the specific name of indigo-plant (*Indigofera anil*). The physiological properties of aniline are but little known, but the researches of Dr. Schuchardt prove that it is a poisonous substance. The results at which he arrived are the following: Aniline may act injuriously on the animal organism, and in large doses may even cause death. Frogs introduced into a weak solution containing aniline died in periods varying from a quarter of an hour to two hours and a half, and death was also caused by the introduction of aniline into the mouth or into a wound in the back. Rabbits were also poisoned by this substance, a small animal being killed by fifty drops in six hours and a quarter, and a larger one by one hundred drops in four hours. In all the animals experimented upon, violent clonic and tonic spasms ensued after the application of the aniline, and continued almost uninterruptedly until death. There was also loss of sensibility, commencing at the lower extremities and extending to the upper, and the temperature of the body was also reduced. Wherever the aniline was applied locally, as in a wound of the back, on the stomach, on the posterior part of the tongue, or on the conjunctiva, appearances of irritation were observed, which are probably connected with the power possessed by aniline of coagulating albumen. The aniline was never detected in the urine, and it is probable that this substance is eliminated from the body rather by the organs of respiration than by the kidneys.—*Brit. and For. Med.-Chir. Rev.*, July, 1861, from *Archiv für Path. Anat. und Physiologie*, 1861.

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8. *On the Physiological Action of Santonine and of the Seeds of Artemisia Contra.*—Santonine is an organic principle obtained from the *Artemisia contra*, and possesses vermifuge properties, but its operation has only recently been minutely studied. Dr. EDMUND ROSE, of Berlin, has taken it himself, in the dose of a gramme (about fifteen grains), without injury. Its taste is bitter, very disagreeable, and persistent, and it is slightly diuretic, but rather confines the bowels. It produces a peculiar and indescribable narcotic effect, and causes a species of colour-blindness, tinging all the objects seen with a yellow hue. The essential oil of *Artemisia contra* is poisonous; it kills rabbits in the dose of about two grammes, producing convulsions which descend from the head to the lower extremities, followed by ascending paralysis. This oil is not vermifuge, for in medicine and medicinal doses it is absorbed in the stomach and the upper part of the small intestines, and does not reach the lumbrici, which generally exist lower down; in larger doses it is poisonous. Santonine, on the other hand, is a good vermifuge; it is innocuous, and traverses the whole of the digestive canal, and is found in large quantity in the fecal matters, for it is almost insoluble in water, and a small part only is transformed into soluble santonate of soda, after contact with the bile, and it is santonine which most rapidly de-

stroys the worms. Santonate of soda ought not to be substituted for santonine, as has sometimes been recommended, for it possesses no superiority over the latter, and is besides of a more disagreeable taste, and is poisonous in large doses.—*Brit. and For. Med.-Chir. Rev.*, July, 1861, from *Archiv für Path. Anat. und Physiologie, &c.*, 1860.

9. *Therapeutical Employment of the Sulphate of Alumina and of the Sulphate of Alumina and Zinc.*—The sulphate of alumina (which is not to be confounded with the common alum, a double sulphate of alumina and potash) was introduced into medical practice by Dr. Homolle. It contains an excess of acid, a small portion of iron, and a little of the double sulphate; and in order to neutralize the free acid, which may burn the linen of the patients and injure the steel instruments of the surgeon, M. Homolle has proposed to add oxide of zinc, thus forming a double sulphate of alumina and zinc. This latter has a more energetic action on heterômorphous tissues than the simple sulphate, and M. Homolle prefers it when it is desirable to apply it to a deep portion of altered mucous tissue, or to destroy an accidental growth. The affections in which it has been successfully employed are inflammations of the tonsils and pharynx, hypertrophy of the tonsils, polypus of the nasal fossæ, ingrown finger-nail, scrofulous ulcers, nævi and vascular growths, inflammatory affections of the neck of the uterus, displacements of that organ, and lastly, cancerous ulcers. In many cases where the tonsils were so much hypertrophied as apparently to require excision, M. Homolle has observed the chronical enlargement to yield to the daily use of the saturated solution of the simple sulphate of alumina. Membranous diphtheric sore-throat, before the larynx was attacked, yielding to the same application, and in a case of polypus of the nasal fossæ, where the morbid growth had sprouted out several times after removal, the patient was finally cured by the same agent. Scrofulous ulcers, touched every day with the sulphate of alumina, began to assume a healthy appearance, their fungous growths being reduced and the cicatrization being promoted; and hypertrophic engorgement of the neck of the uterus, and erythematous, granular, or ulcerous inflammation of its lips, was rapidly improved or cured by the direct application of the double sulphate with the addition of injections of the same salt. In its direct action it favours the exfoliation of the morbid tissue in successive layers; it diminishes the ichorous discharge of the ulcerated surface, destroys the smell, and causes the secretion to resemble healthy pus, and diminishes or completely removes the lancinating pains which are peculiar to cancer. M. Homolle's conclusions, in reference to the use of the sulphate of alumina and the double sulphate of alumina and zinc, are the following:—

1. These salts, used externally, may be ranked as modifying agents, occupying a place between catheretics and caustics. 2. They are particularly useful in inflammations of the tonsils and pharynx, and in the affections of the neck of the uterus; and 3. They possess, moreover, a special remedial power over cancerous ulcers, the progress of which they retard or modify, acting in this respect at once as caustics, disinfectants, and hæmostatics. They often succeed better than narcotics in relieving the pain peculiar to cancer, and they retard the development of the attendant cachexia.—*Brit. and For. Med.-Chir. Rev.*, July, 1861, from *Bull. Gén.de Thérap.*, March 30, 1861.

10. *Employment of Cajeput Oil.*—M. Delvaux, after giving a historical statement of the therapeutical employment of this substance, next furnishes an account of his own experience of its use when combined with passive substances, admitting of its properties being readily judged of. He has found it of great use in advanced and painful dental caries. A drop or two is inserted into the cavity and retained there by some cotton which had been dipped in the oil. After some minutes a sense of cold and numbness ensues, and the pain rarely resists. Essential dyspepsia, accompanied by intestinal flatuosity is treated with success by the oil. A tablespoonful of a mixture of two or three parts of the oil with 160 parts of mucilage and 30 of syrup may be given every hour, or a pill containing half a grain of the oil mixed up with magnesia may be substituted. The meteorism met with in severe diseases may be combated by an em-